

ABSTRACT

An amorphous layer 101 is formed in a region from a surface of a silicon substrate 100 to a first depth A. At this time, defects 103 are generated near an amorphous-crystal interface 102. By heat treatment, the crystal structure of the amorphous layer 101 is restored in a region from the first depth A to a second depth B that is shallower than the first depth A. The resultant amorphous layer 101 extends from the surface of the silicon substrate 100 to the second depth B. The defects 103 remain at the first depth A. By ion implantation, a pn junction 104 is formed at a third depth C that is shallower than the second depth B.